

### REMARKS

Claims 1-10, 12-18, and 20-26 are pending in the present Application. Claims 1, 9, 14, 16, and 21 have been amended, claims 2-6 and 23 have been canceled, and claim 27 has been added, leaving claims 1, 7-10, 12-18, 21-22, and 24-27 for consideration upon entry of the present Amendment.

No new matter has been introduced by these amendments.

Claims 1 and 9 have been amended to correct an inadvertent typographical error.

Claim 21 has been amended to add the inadvertently missed claim number from which claim 21 depends.

Antecedent basis for the amendment wherein the composition contains essentially no water in claims 1, 14, and 16 can be found at least at page 28, paragraph [84] of the application as originally filed, and claim 23, canceled herewith.

Antecedent basis for new claim 27 can be found at least at pages 10-11, paragraphs [35] to [40], and claims 2-6 as originally filed, canceled herewith.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

#### Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1, 2, 7-10, 12, 16-18, 22-24, and 26 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Colbert (US 2004/0154264) in view of Lightner, Jr. et al. (US 2005/0126530) and Eckberg et al. (US 6,610,760).

Claims 3-6 and 13 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Colbert (US 2004/0154264) in view of Lightner, Jr. et al. (US 2005/0126530) and Eckberg et al. (US 6,610,760) and further in view of Randall et al. (US 2003/0203191).

Claims 20 and 21 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Colbert (US 2004/0154264) in view of Lightner, Jr. et al. (US 2005/0126530) and Eckberg et al. (US 6,610,760) and further in view of Garnett et al. (US 6,162,511).

Applicants respectfully traverse the rejections.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, or knowledge generally available in the art at the time of the invention, must provide some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The obviousness inquiry also requires consideration of common knowledge and common sense. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742-43 (2007); *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006) ("Our suggestion test is in actuality quite flexible and not only permits, but requires, consideration of common knowledge and common sense.")

The pending claims of this application are directed to gypsum boards having a cured coating derived by a high radiation cure of a radiation curable formulation, wherein the radiation curable formulation comprises at least one reactive diluent and is essentially free of water.

Colbert discloses coating compositions for coating gypsum boards and coated gypsum board products. Lightner et al. teach building articles with bioresistant properties, including coating compositions useful for surface treatment of building articles such as gypsum boards. Both Colbert and Lightner et al. disclose water as a solvent for their respective coating compositions. Randall teaches a moisture-tolerant structural panel comprising a set gypsum core sandwiched between and faced with mats having an aqueous coating applied therewith. Garnett et al. disclose coating compositions wherein water is used as a solvent.

Eckberg et al., which is newly cited, discloses a curable composition containing an epoxy-functional silicone polymer and a non-fluorescing polycyclic aromatic compound. The composition is useful for pressure sensitive adhesive-backed articles.

The amended claims of the present application are not obvious over the cited references since there is a nonobvious difference between the references and the present claims. Based on the conflicting teachings of the cited references and the common knowledge in the art, one skilled in the art would not modify the prior cited references (i.e., Colbert,

Lightner et al., Randall, and Garnett et al.) in view of newly cited Eckberg et al., or combine the prior cited references and Eckberg et al. because there is no expectation of success in making the combination, and such combination would not lead to the pending claims.

The prior cited references and Eckberg et al. disclose two incompatible coating systems that are not reasonably combinable with each other. All coating compositions disclosed by the prior cited references are aqueous based coating compositions. In particular, water is disclosed as a solvent in Colbert (Paragraphs [0035], [0086]-[0092], Tables 3 and 4); water and/or organic solvents are taught by Lightner et al. (Paragraph [0025]); Randall et al. teaches an aqueous coating composition (Paragraph [0023] and throughout the specification), and water is disclosed as a solvent to control viscosity in Garnett et al. (Col. 4, lines 22-23). In contrast, Eckberg et al. disclose a coating composition containing an epoxy-functional silicone polymer. As would be known to one of ordinary skill in the art, the coating composition is non-aqueous and water repellent. The references do not provide any incentive or motivation for the alleged combination. In fact, based on the teachings of the cited references and the available common knowledge, one skilled in the art would not combine the prior cited references and Eckberg et al. since components from two incompatible systems is likely not compatible.

Further, the alleged combination has no reasonable expectation of success. As explained in detail above, the prior cited references all teach aqueous based coating compositions, while Eckberg et al. teach a non-aqueous, water repellent coating composition. The alleged combination would require one skilled in the art at the time of the invention to combine a reactive diluent from a non-aqueous, water repellent coating system and components from an aqueous coating system in the hope that those components could work together to create a coating of the present claims. However, common knowledge and common sense indicates a reactive diluent for a water repellent coating system may not work with components from an aqueous system. The alleged combination therefore does not have a reasonable expectation of success.

Additionally, Applicant maintains that the alleged combination is based on improper hindsight. More specifically the Examiner has used Applicant's disclosure to select portions of the cited references to allegedly arrive at the present claims. In doing so, the Examiner has

failed to consider the teachings of the references and common knowledge of the art that lead away from the present claims.

In sum, based on the above, the pending claims are not obvious over the cited references. Reconsideration and withdrawal of the rejections are respectfully requested.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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